

#### **AUTHOR:**

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Take an adventure through the galaxy with Sam and his dog, Comet, as they face a meter shower, a cloud of poison gas, an alien ship, and a galactic beast. How will they make use of the space shapes?

Ages: 5 to 9 years

Interest Level:

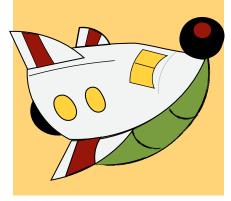
Kindergarten to 3rd Grade

**ATOS Reading Level:** 2.2

Lexile: 510L

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# Captain Invincible and the Space Shapes

Will Sam and Comet defeat the galactic beast?

**Topics:** shapes

Math Connections: Use Captain Invincible and the Space Shapes to explore shapes with your child. While exploring the galaxy with Sam, your child will be introduced to 3-dimensional (3-D) and 2-dimensional (2-D) shapes. Shapes that are 3-D are solids, have volume, and have three dimensions: length, width, and height. Shapes that are 2-D are flat and are distinguished by their sides and vertices (corners).

Before reading, identify the different shapes throughout the book. Can your child distinguish between the 2-D and 3-D shapes? Are some shapes composed of other shapes? Compare the shapes from the book to the environment around you. What objects around you are made up of shapes from the book? Walk through the room and see what objects you can find together.

Playing with shapes gives your child the opportunity to learn about them, becoming familiar with shape names and their unique characteristics. This experience will help your child to identify, describe, sort, construct, and reason with shapes and other visual information in their everyday environment and in math.

Explore sorting objects by shapes and their characteristics. Gather a group of items and ask your child to sort the objects into groups based on the shape. For example, sort objects into three groups; objects that contain a circle, objects that contain a square, and objects that contain a triangle. Count and see how many objects are in each group. Explore other ways to sort the objects. Ask your child to make group of objects that are composed of more than one shape. What other characteristics can your child use to sort the objects (size, color, use...)?

#### EARLY MATH PROJECT LITERATURE REVIEW

#### **Extension Questions:**

- 1. What makes a shape unique? How can you tell one shape apart from another?
- 2. Where do you see shapes in your everyday routine? What shapes do you see?
- 3. What can you make out of shapes? Can you make other shapes? Can you make other objects? What would you make? How would you do it? Try it!
- 4. If you were faced with a challenge like a galactic beast, how would you use shapes to save yourself?

Vocabulary for Building Math Concepts

Vocabulary for Extending Math Concepts

Vocabulary for Reading Comprehension

4, all, cube, cylinder, first, odd, only, pyramid, rectangular prism, shapes, sphere, square

attributes, sorting

invincible

**Spanish Title:** Not available

Also available in: French and Korean

Related Books: Color Zoo and Color Farm by Lois Ehlert; Perfect Square by Michael Hall; Shape Song Swing Along by Steve Songs

Find this book at your local library: https://www.worldcat.org/title/captain-invincible-and-the-space-shapes-level-2-three-dimensional-shapes/oclc/1038247878?referer=di&ht=edition

### **Early Math Project Resources:**

Popsicle Shapes: <a href="https://bit.ly/3gfuf4y">https://bit.ly/3gfuf4y</a> (English)

Coming Soon! (Spanish)

#### **Online Resources:**

Book resources from MathStart: <a href="https://www.mathstart.net/">https://www.mathstart.net/</a> <a href="earth-day-hooray.html">earth-day-hooray.html</a>





## EARLY MATH PROJECT LITERATURE REVIEW

Age Level	Related Preschool Foundations and CA State Standards
Grades K-3	California Common Core State Math Standards <a href="https://bit.ly/31No7bP">https://bit.ly/31No7bP</a>
Kindergarten	Geometry K.G.1 Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). K.G.4 Analyze, compare, create, and compose shapes.
Grade 1	Geometry 1.G.1 Reason with shapes and their attributes.
Grade 2	Geometry 2.G.1 Reason with shapes and their attributes.
Grade 3	Geometry 3.G.1 Reason with shapes and their attributes.